



# Hunters Point Naval Shipyard BCT Meeting



## Remedial Action Update Parcel B (Excluding IR Sites 7 & 18)

April 25, 2013



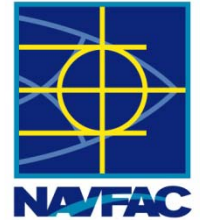
# Presentation Overview



- **RA Implementation Update**
  - Shoreline Revetment
  - Polylactate Injection at IR-10
  - Building Foundation Repairs
  - Soil Cover
  - SVE in Building 123
- **RA Schedule Update**
- **RA Photos**



## RA Implementation Update

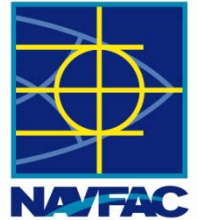


### Shoreline Revetment

- Imported 12,000 tons of rip rap (by barge) and 5,200 tons of filter rock by truck for revetment construction (100% of total)
  - *Barging rip rap saved 1,067 truck trips through the community*
- Constructed ~1,600 of 1,830 LF of revetment (87% of total)
- 230 feet of revetment remaining to be constructed within Combined Sites Area



## RA Implementation Update



### Poly lactate Injection at IR-10

- Cored Bldg. 123 concrete slab for polylactate injections
- Injected 6,290 lbs. of polylactate (25% HRC Primer and 75% HRC) into 45 injection points (Feb/Mar)
- Collected post-injection groundwater samples 5 weeks after injection
- Samples will be analyzed to determine if the injections shifted the plume and if bioremediation is occurring (data expected late April)
- Performing biofouling inspections periodically for 3 months following injections (no biofouling to date)



## RA Implementation Update



### Building Foundation Repairs

- Inspected all building foundations to identify cracks, holes, trenches, and penetrations
- Completed building foundations repairs, including:
  - Grouting penetrations
  - Filling cracks and holes with mortar or concrete
  - Excavating top 6" of soil in trenches and backfilling with 4" AB and 2" AC
- Remaining work includes covering crawl space openings with wire mesh



## RA Implementation Update



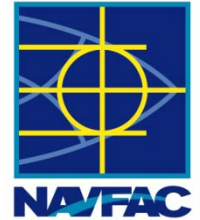
### Soil Cover

- Completed tree removal and clearing/grubbing
  - *Mulched trees for reuse as BMP*
- Completed hillslope excavation to tie soil cover into surrounding grades
- Imported 16,800 tons of clean fill by barge
  - *Barging clean soil saved 1,493 truck trips through the community*
- Installed ~15,000 tons of 2-foot soil cover (89% complete)
- Hydroseeded and hydromulched 2 acres of cover
- Remaining work includes completing soil installation, 1.5 acres of hydroseeding/hydromulching, erosion control blanket/CTRM installation, and vegetation establishment (irrigation)





## RA Implementation Update

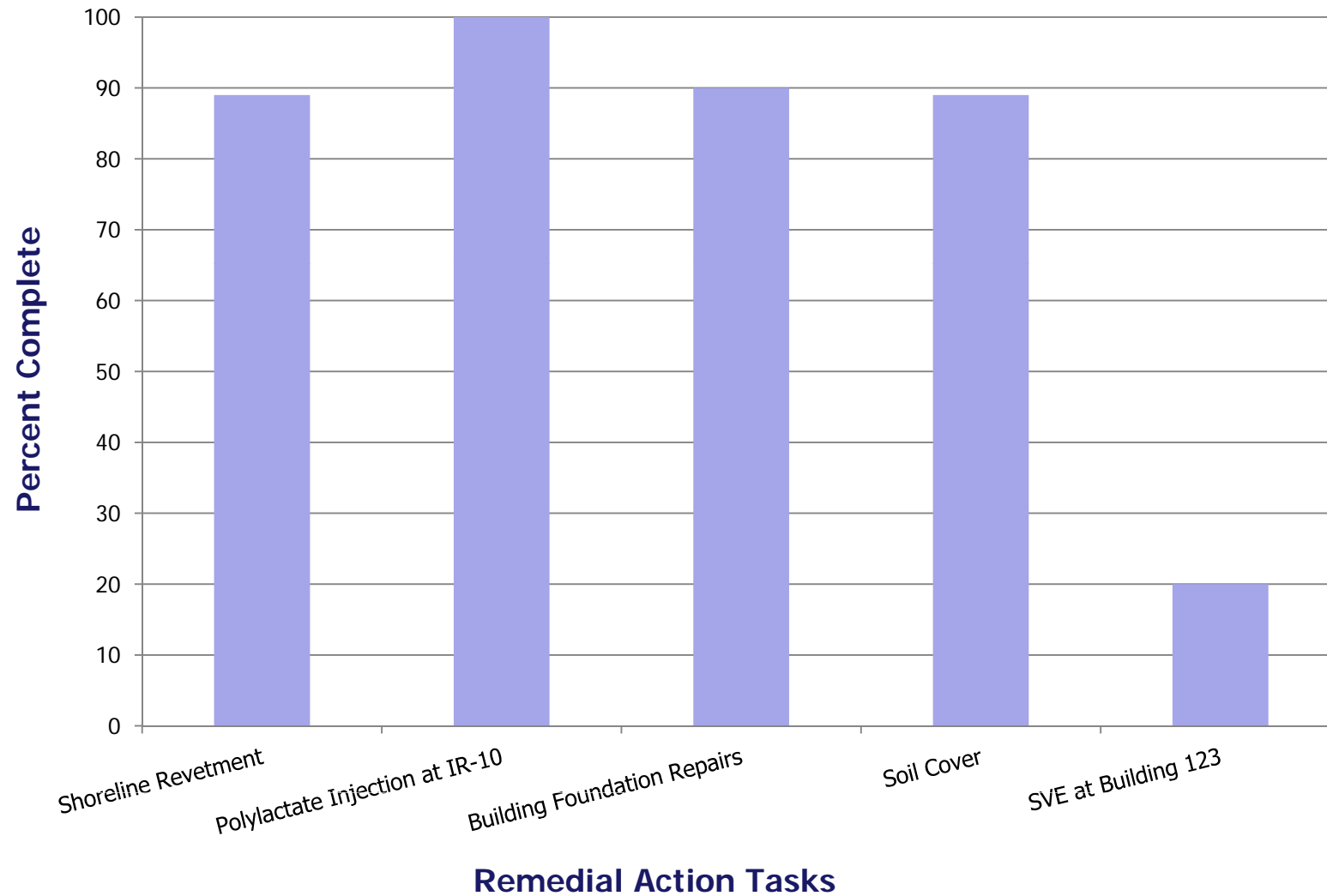


### SVE at Building 123

- Mobilized SVE treatment system components for system expansion (2 x 2,000 lb. GAC units, piping, and valves)
- Drilled and installed new SVE wells and monitoring probes
- Completed baseline sampling (60 SVE wells and vapor monitoring wells)
- Mapped baseline data to establish current soil gas conditions
- Will host a Triad meeting to present baseline data and discuss strategy for system startup, operation, and monitoring
- Strategy will ensure efficient operation and performance of the system
- System commissioning and startup following Triad concurrence



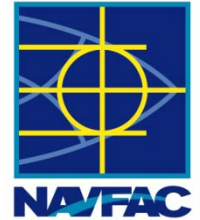
## RA Implementation Update







## RA Schedule Update



### Construction Schedule

- |   |                             |
|---|-----------------------------|
| • Mobilization and Site Preparation:              | Nov 5, 2012 – Nov 12, 2012  |
| • Revetment Construction:                         | Nov 12, 2012 – Jan 17, 2013 |
| • Polylactate Injection:                          | Feb 22, 2013 – Mar 3, 2013  |
| • Foundation Inspections and Repairs:             | Jan 17, 2013 – May 5, 2013  |
| • SVE System Setup and Operation:                 | Mar 4, 2013 – TBD           |
| • Soil Cover Installation:                        | Feb 22, 2013 – Jun 4, 2013  |
| • Grading:  | May 6, 2013 – July 3, 13    |
| • Asphalt Cover Installation:                     | Jun 17, 2013 – Sep 10, 2013 |
| • Fence and Settlement Monument Installation:     | Sep 11, 2013 – Sep 17, 2013 |
| • Site Cleanup, Final Survey, and Demobilization: | Sep 11, 2013 – Sep 17, 2013 |
| • Revetment Construction at Combined Site:        | TBD                         |



## RA Photos Barge Offloading Rip Rap (Typ.)





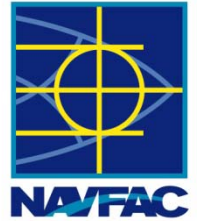


## RA Photos Completed Revetment Structure





## RA Photos IR-26 Revetment Completed to TPH AOC







## RA Photos Injection Tool Installation Using Direct Push Rig (Typ.)





## RA Photos Polylactate Injection (Typ.)







## RA Photos Repaired Cracks/Holes in Building Foundation (Typ.)





## RA Photos Grouted Penetrations in Building Foundation (Typ.)







## RA Photos Excavation of Soil in Building Trench (6-inch Depth, Typ.)





## RA Photos Installation of 4 inches of AB in Building Trench (Typ.)







## RA Photos Installation of 2 inches of AC in Building Trench (Typ.)





## RA Photos Barge Offloading Clean Fill (Typ.)







## RA Photos Hillslope Excavation Behind Buildings 103/104







## RA Photos Soil Cover Installed Behind Buildings 103/104







## RA Photos Excavated Hillslope (Typ.)







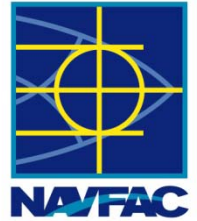
## RA Photos Hillslope Excavation Behind Retaining Wall







## RA Photos Installed Soil Cover (Typ.)





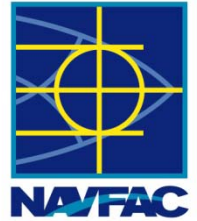
## RA Photos Soil Cover Along Robinson/Galvez







## RA Photos Hydroseeded and Hydromulched Hillslope







## RA Photos Hydroseeded and Hydromulched Hillslope







## RA Photos Hydroseeded and Hydromulched Hillslope





## RA Photos SVE and Vapor Monitoring Wells Installed in Bldg. 123







## RA Photos Soil Gas Sampling Equipment (Typ.)







## RA Photos Soil Gas Baseline Sample Collection (Typ.)

